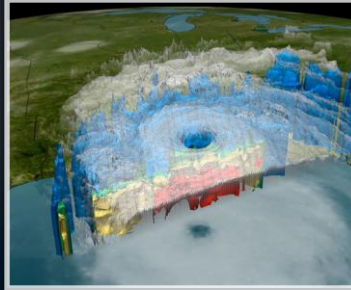
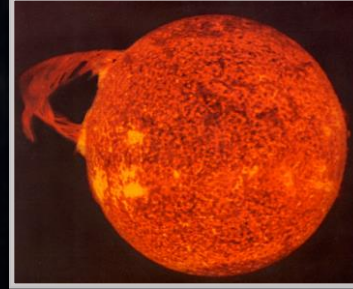
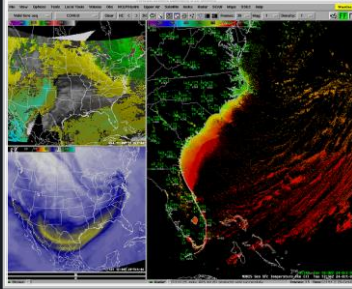
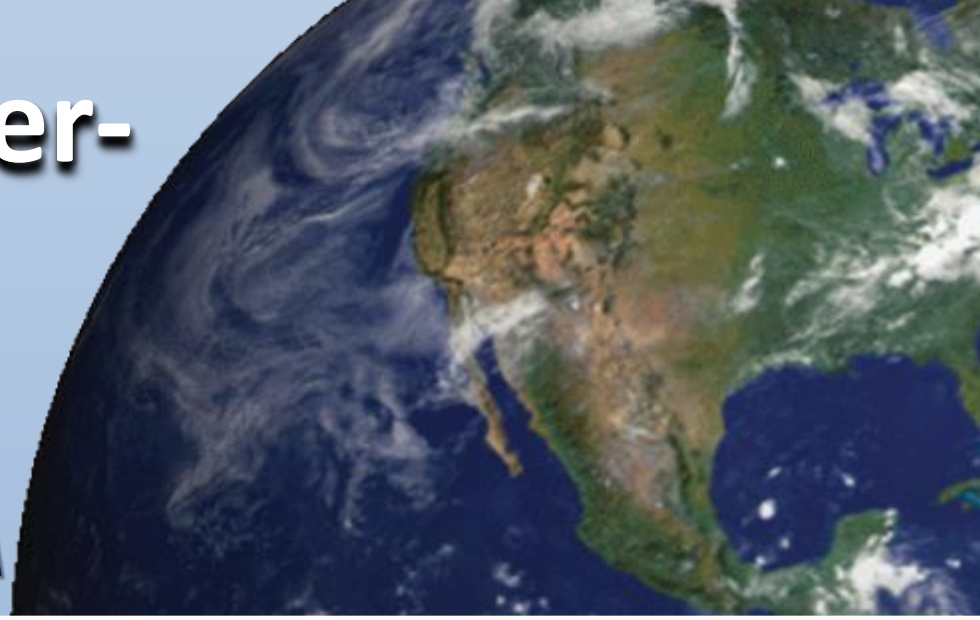


# Building a Weather-Ready Nation

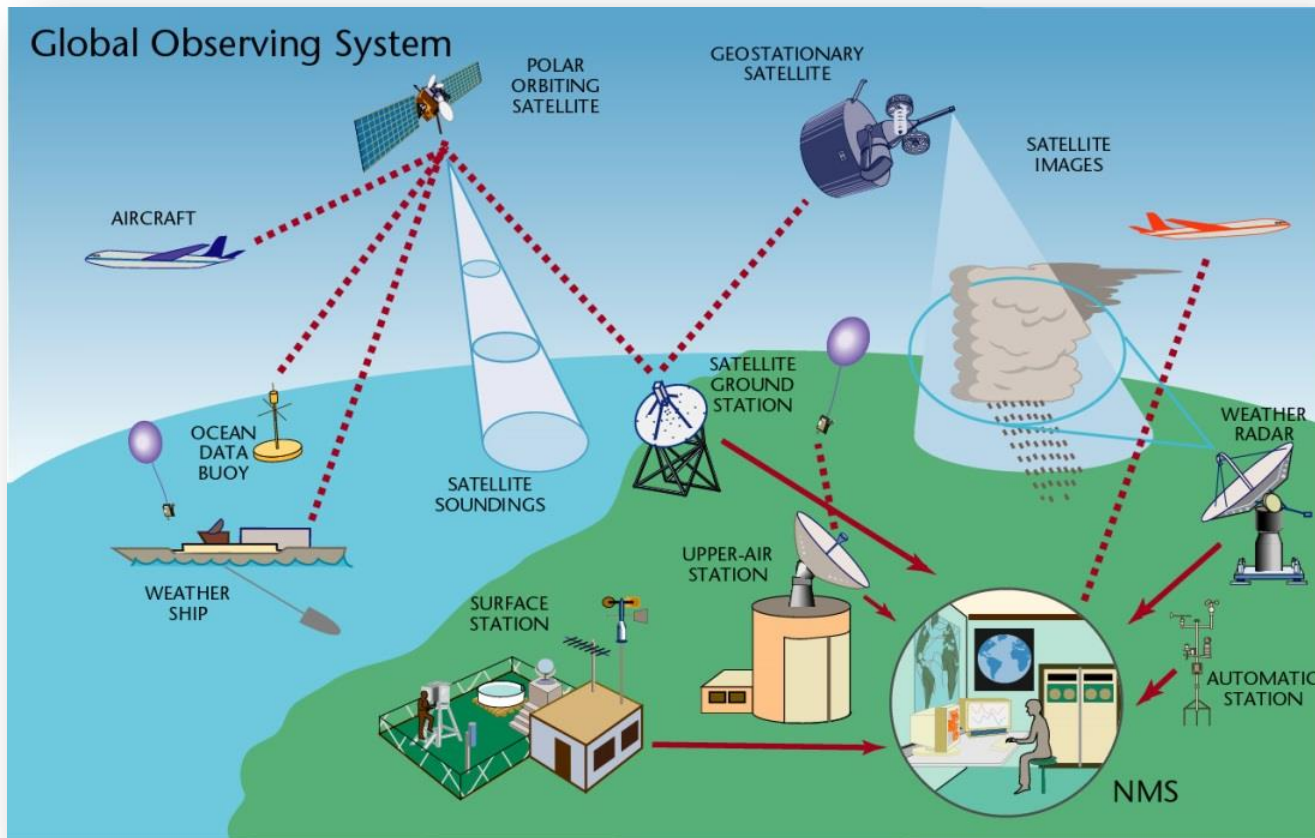
*NWS Partners Meeting  
January 14, 2016 • New Orleans, LA*



Joe Pica  
Director, Office of Observations

# Observations Portfolio

Responsible for the collection of space, atmosphere, water, and climate observational data owned or leveraged by the NWS



# Sustaining Critical Observations

## Maintaining system availability to support the NWS mission -



### NEXRAD

- Maintain system availability > 96%



### Upper Air

- Maintain 102 sites with GPS radiosondes; 2 launches per day



### ASOS

- Maintain system at required sensor availability > 96%



### Buoy Networks – Weather, DART, TAO

- Average network data availability > 80%



## NEXRAD Service Life Extension Program

- Signal Processor Technology Refresh
  - Development & Integration Testing Complete
  - System Testing Underway
  - Deployment Begins in FY16
- Transmitter Technology Refresh
  - Work Initiated
- Shelter Refurbishment
- Pedestal Refurbishment



# Investing in Observation Infrastructure

## Radiosonde Frequency Migration Project

- Due to the sale of “spectrum”, radiosondes operating in the 1680 MHz band must be migrated to operate in the 403 MHz band.
- Funds from the “spectrum” sale are being used to finance the migration.
- “Autosonde” technologies are being evaluated as a potential alternative.



# Investing in Observation Infrastructure

## Automated Surface Observing System (ASOS) Acquisition Control Unit / Data Collection Package Redesign

- ACU / DCP components reaching obsolescence in the near future
- 2 ACU and 2 DCP Prototypes Built
- Preparing for System Tests
- Preparing for Drawing Validation and Level III Drawing Package release





# Investing in Observation Infrastructure

## Self-Contained Ocean Observations Payload (SCOOP) Systems

- Smaller, easier to maintain
- Servicing can be conducted by smaller vessels, reducing cost

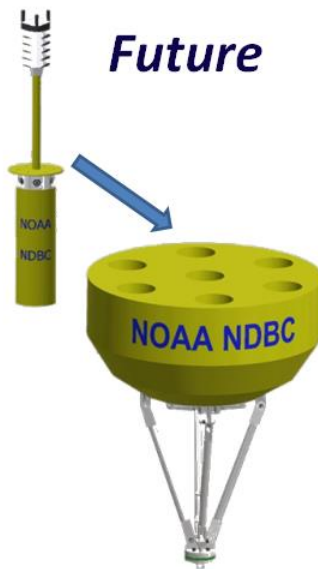
*Past*



*Present*

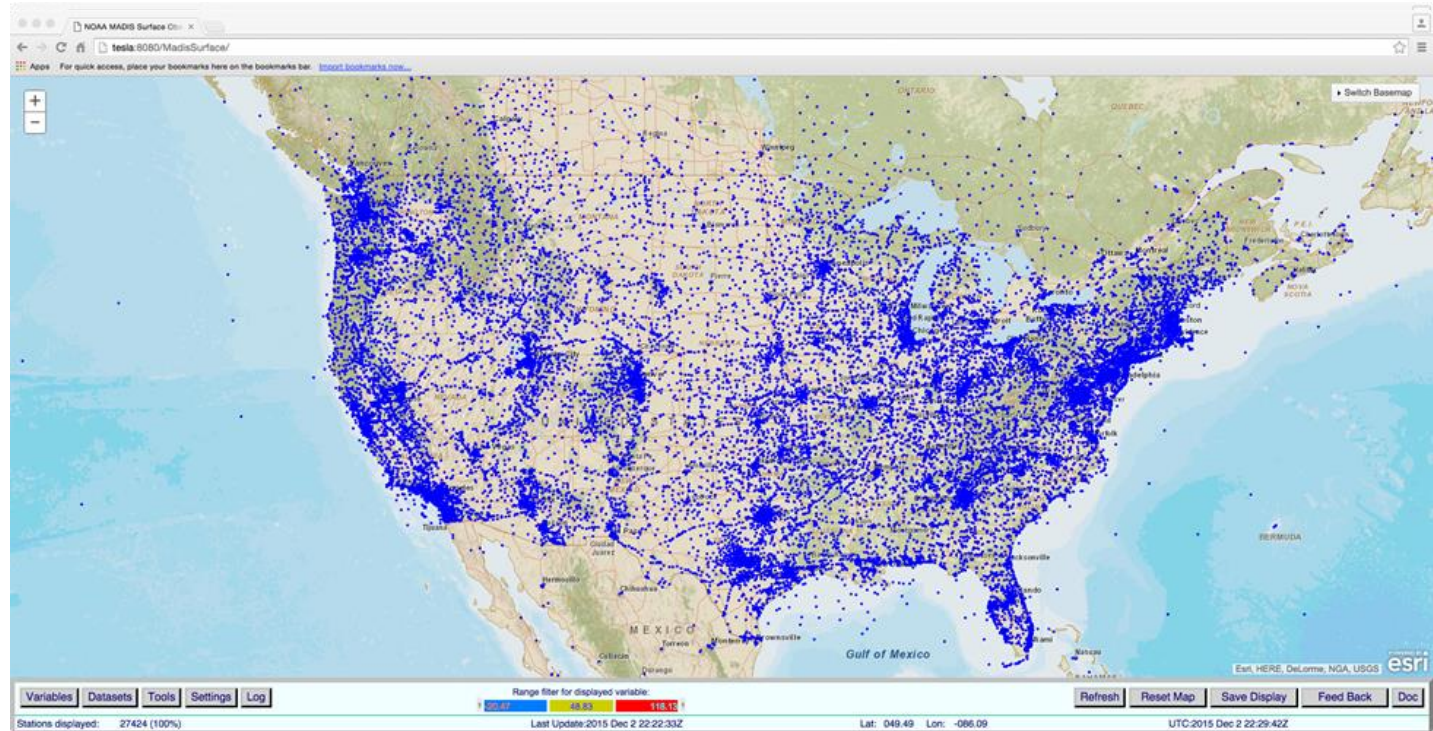


*Future*



# Leveraging Smart Data Buys

## National Mesonet Program -

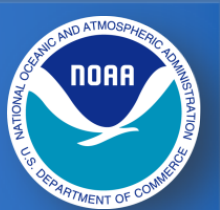


- As of FY15, National Mesonet supports 8000 surface observing sites, 4000 of which have soil moisture and 1400 have solar radiation measurements
- National Mesonet now includes the TAMDAR data set, which provides approximately 3500 aircraft soundings per day in the vicinity of 300 regional airports
- The program also supports 68 fixed location vertical profiling systems (mostly SODARS and radiometers), and the CASA network in the DFW region





# Ensuring Readiness for Satellite Observations



## **DSCOVR**

- Launched February 11, 2015

## **Jason-3**

- Launch Date: January 17, 2016

## **COSMIC-2a**

- Launch Date: September 2016

## **GOES-R**

- Launch Date: October 14, 2016

## **JPSS-1**

- Launch Date: Q2 FY17



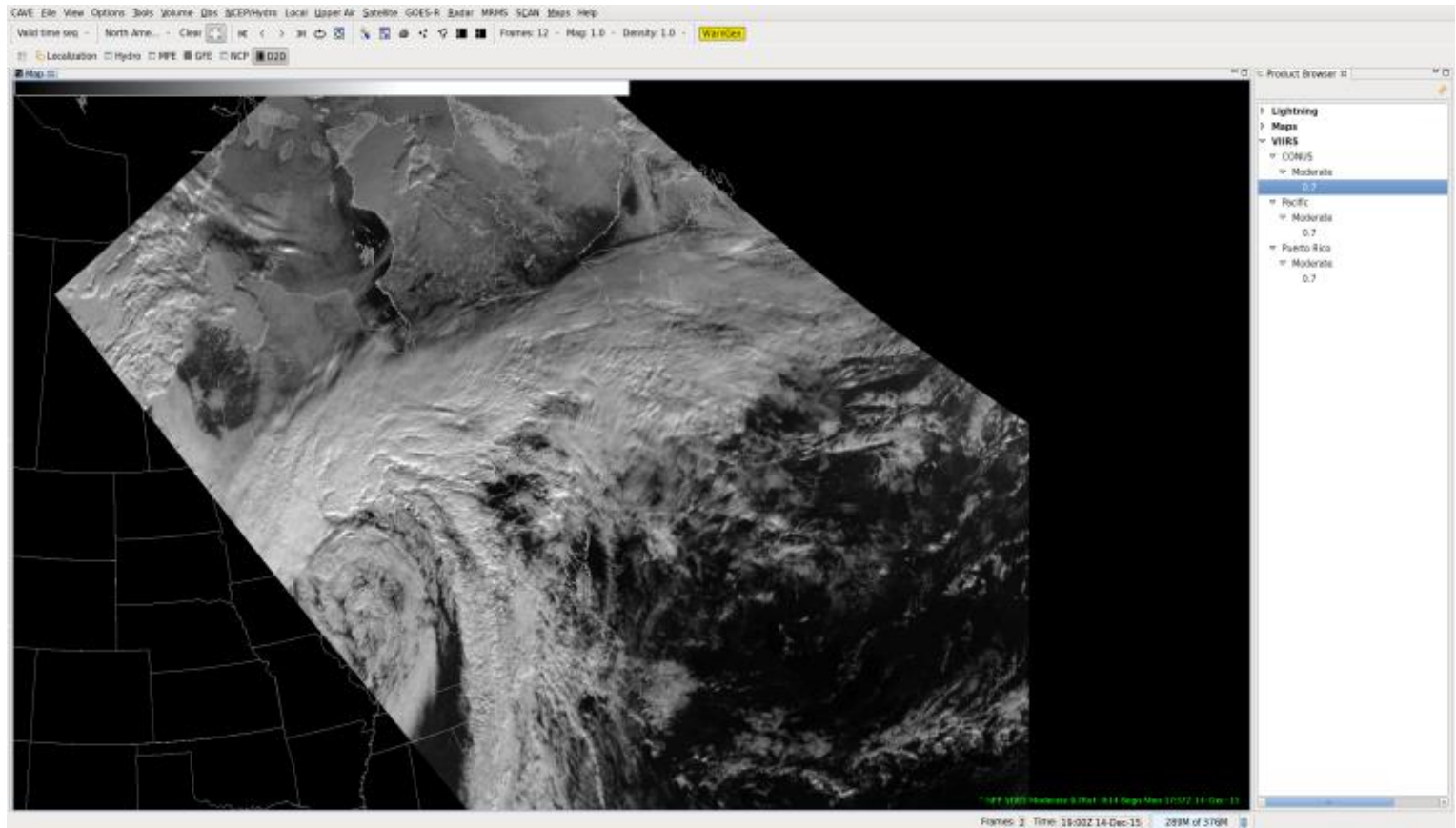


# Ensuring Readiness for Satellite Observations



## First S-NPP/VIIRS Near-Constant Contrast Products

- Across SBN and into AWIPS2 - Dec 14 2016





Questions?